

AMENDMENTS

AMENDMENTS TO THE CLAIMS

This listing of claims is intended to replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for fulfilling an order in a supply chain that is distributed over a plurality of geographic locations, comprising:

receiving an advance demand notice representative of the order that includes a specification of one or more physical items of interest to the customer; and

using a network of intelligent agents to ~~stage and manage~~ move the physical items specified in the advance demand notice to at least one of the plurality of geographic locations within the supply chain as a function of a probability of need for each item.

2. (Previously Presented) The method as recited in claim 1, further comprising the step of extracting information from a customer maintenance system to create the advance demand notice.

3. (Previously Presented) The method as recited in claim 2, further comprising the step of creating the advance demand notice order in response to a change in a scheduled maintenance work order.

4. (Previously Presented) The method as recited in claim 3, wherein the step of creating the advance demand notice order in response to a change in a scheduled maintenance work order comprises modifying an existing advance demand notice.

5. (Currently Amended) The method as recited in claim 1, further comprising the step of using an equipment knowledge base to determine the probability of need for each physical item.

6. (Currently Amended) The method as recited in claim 1, further comprising the step of coordinating with a carrier to move the physical items within the supply chain.

7. (Currently Amended) The method as recited in claim 6, further comprising the step of using the intelligent agents to form a fulfillment plan for use in moving the physical items within the supply chain.

8. (Currently Amended) The method as recited in claim 7, further comprising the step of monitoring the movement of the physical items within the supply chain.

9. (Currently Amended) The method as recited in claim 8, further comprising the step of forming an alternative fulfillment plan for use in moving the physical items to at least one of the plurality of geographic locations within the supply chain if the intelligent agents determine from the monitoring that the supply chain is unable to meet a previously formed fulfillment plan commitment.

10. (Currently Amended) The method as recited in claim 1, further comprising the step of ordering ~~product~~ the physical items from a supplier to initiate the staging of the physical items within the supply chain.

11. (Currently Amended) The method as recited in claim 1, further comprising the step of ordering ~~product~~ the physical items from a supplier to replenish the physical items ~~staged~~ at at least one of the plurality of geographic locations within the supply chain as the physical items are moved to at least one different one of the plurality of geographic locations within the supply chain.

12. (Currently Amended) The method as recited in claim 1, further comprising the step of using a customer defined level of service to ~~stage and manage~~ move the physical items specified in the advance demand notice.

13. (Currently Amended) The method as recited in claim 1, further comprising the step of determining if the probability of need for ~~an~~ a physical item specified in the advance demand notice is 100% and, if so, converting the advance demand notice into a purchase order for that physical item.

14. (Currently Amended) The method as recited in claim 1, further comprising the step of using the current and developing states of inventory of the physical items at one or more of the plurality of geographic locations within the supply chain to ~~stage and manage~~ move the physical items specified in the advance demand notice within the supply chain.

15. (Currently Amended) The method as recited in claim 1, further comprising the step of taking into account a desired level of safety stock of the physical items at one or more of the plurality of geographic locations when ~~staging and managing~~ moving the physical items specified in the advance demand note within the supply chain.

16. (Currently Amended) The method as recited in claim 1, wherein the advance demand notice includes a probability of need for each physical item.

17. (Currently Amended) The method as recited in claim 1, further comprising the step of using sourcing options specified by a customer to provide physical item alternatives to the physical items specified in the advance demand notice.

18. (Currently Amended) A method for fulfilling an order in a supply chain that is distributed over a plurality of geographic locations, comprising:

extracting from a customer system information pertaining to ~~the~~ a work order that specifies a piece of equipment to be repaired and physical items expected to be used during the repair procedure;

determining, using an equipment knowledge base, a probability that each of the physical items will be needed to effect the repair procedure;

using the determined probability to ~~stage~~ move the physical items to at least one of the geographic locations within the supply chain whereby the physical items are made ready for use in the repair procedure;

extracting from the customer system information pertaining to a completion of the repair procedure; and

using the information pertaining to the completion of the repair procedure to populate the equipment knowledge base for use in future probability of need calculations.

19. (Currently Amended) A method for fulfilling orders in a supply chain that is distributed over a plurality of geographic locations, comprising:

receiving a first customer order specifying ~~planned~~ plans to purchase physical items having a probability of need of 100 percent;

receiving a second customer order specifying ~~planned~~ plans to purchase the physical items having an uncertain probability of need;

determining the probability of need for the physical items in the second customer order; and

using the determined probability of need to move the physical items to one or more of the plurality of geographic locations within the supply chain to simultaneously fulfill the first customer order and the second customer order.